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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/777,700

02/11/2004

Hee Jcong Kim

2080-3228

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7590

11/30/2007

LEE, HONG, DEGERMAN, KANG & SCHMADEKA

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LOS ANGELES, CA 90017

EXAMINER

NGUYEN, CUONG H

ART UNIT

PAPER NUMBER

3661

MAIL DATE

DELIVERY MODE

11/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/777,700

Applicant(s)

KIM, HEE JEONG

Examiner

CUONG H. NGUYEN

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/16/2007 (the RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-10,12 and 15-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-10,12 and 15-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/02/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. This Office Action is the answer to the RCE filed on 8/16/2007.
2. Claims 1-4, 6-10, 12, and 15-34 are pending; wherein claims 5, 11, and 13-14 are canceled.

Response

3. From the submitted IDS (7/02/2007), the examiner submits that N. V. PHILIPS (EP 0 542 331 A1) modifies what was missing in Kishi et al.'s disclosure to arrive pending claims as filing.

Kishi et al. (US Pat. 5,638,279), and Garmin (GPS) International suggest a vehicle navigation system, comprising:

- a controller is adapted to generate the indication of the vehicle's progression by one of gradually filling the arrow with color and gradually removing color from the arrow.

Kishi et al. disclose that a navigation system stores information relating to the vehicle course to a defined target point, with display of map information relating to the actual vehicle position and its immediate surroundings. A discrete display indicates the vehicle position as it approaches an intersection from a point at a defined distance from the latter, the display terminated when the vehicle has passed the intersection. Pref. the discrete display uses a vehicle position marker which is indexed in step in the direction of the displayed intersection. The point at which the vehicle passes the intersection is determined from the vehicle travel direction variation.

Kishi et al. provides real-time display of vehicle position upon approaching each vehicle intersection.

Kishi et al.'s display format only includes moving the mark in increments relative to the map information toward a displayed intersection corresponding to the intersection being approached by the vehicle as the vehicle moves toward the intersection and maintaining the mark at the displayed intersection until the vehicle has passed the intersection.

Garmin International's nuvi models do not disclose about gradually filling a direction arrow with color, and gradually removing said color from said arrow in a navigation system.

However, this action of changing a format of representation (as claimed) is merely a way in many different well-known styles of representation by artists and therefore has no new inventive concept, and N. V. PHILIPS teaches that idea (see PHILIPS, cols. 2, 5 lines 15-22, 30-33).

It would have been obvious to one of ordinary skill in the art, at the time of invention to combine above mentioned prior art to fill a direction arrow with a color for indicating a current progression on a navigation map, to draw attention of a user at a particular place on a map.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-10, 12, and 15-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi et al., in view of N.V. PHILIPS (EP 0 542 331 A1)

A. Per claim 1, Kishi teaches a navigation system including a map data memory (see Kishi et al., ref. 10 in figure 2), an input unit ((see Kishi et al., ref. 24 in figure 2), a GPS receiver (see Kishi et al., ref. 12 in figure 2), a gyro sensor (see Kishi et al., ref. 14 in figure 2), a controller (see Kishi et al., ref. 32 in figure 2) for generating the configuration of an intersection the user is supposed to enter and an arrow indicating a driving route to the user and for displaying a progression rate of the car along the route (see Kishi et al., col. 4-5), and a display driving unit (see Kishi et al., ref. 42 in figure 2) for performing a graphic operation on the configuration whereby a gradual progression rate of the car is indicated in the arrow (see Kishi et al., figures 7A- 7C).

Kishi et al. do not explicitly disclose that a claimed action of “gradually filling the arrow with color and gradually removing color from the arrow”. (the claimed language of “by one of “ means only one condition is enough to meet claimed limitation.

However, this action is merely a way to represent a difference in many different well-known styles of representation, and N. V. PHILIPS teaches that idea (see PHILIPS, cols. 2, 5 lines 15-22, 30-33).

It would have been obvious to one of ordinary skill in the art, at the time of invention to fill the direction arrow with a color indicating a current progression, to draw attention of a user at a particular place on a map as taught by Kishi et al., and N. V. PHILIPS combinations.

- B. Per claims 2 and 6, Kishi teaches standard map information (column 4, lines 20-24).
- C. Per claims 3 and 4, Kishi teaches that the entrance link is "headed up" (see figure 4).
- D. Per claim 7, Kishi teaches that the arrow points at a start node getting out of an intersection (see for example, figures 7A-7C).
- E. Per claim 8, Kishi teaches a method of operating a navigation system including obtaining information about an intersection, calculating "heading up" and "screen coordinates", displaying the complicated intersection, and displaying a route that passes through the complicated intersection (column 5-6), and further changing the color of the route (column 5, lines 1-5).
- F. Per claim 9, Kishi teaches standard map information (column 4, lines 20-24).
- G. Per claim 10, Kishi teaches that the entrance link is "headed up" (see figure 4).
- H. Per claim 11, Kishi teaches constructing a map database (10, figure 2), displaying a driving route (see figure 4), using information from the map database and GPS receiver (column 4), extracting the configuration of the intersection and displaying the configuration (see figure 4), displaying a traveling direction of a car in the intersection, including gradually changing an arrow displayed and keeping pace with the present position of the car (see figures 7A-7C).
- I. Per claim 12, Kishi teaches that the entrance link is "headed up" (see figure 4).
- J. Per claim 13, Kishi teaches changing the color of the route (column 5, lines 1-5).
- K. Per claim 14, Kishi teaches indicating progression for all intersections.
- 5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi et al.,

in view of N.V. PHILIPS (EP 0 542 331 A1), and in view of Smith, Jr.
(US005323321A).

A. Per claim 5, Kishi teaches the invention as explained in the rejection of claim 1~
Kishi does not teach filling or emptying the arrow to indicate the progression of the
vehicle. Smith, Jr. teaches a navigation system that displays an arrow that is gradually
filled to indicate route progression (see figures 2 & 3).

It would have been obvious to one of ordinary skill in the art, at the time of
invention, to fill the arrow indicating route progression, as an alternative to the method of
progression taught by Kishi et al., and N.V. PHILIPS, as shown by Smith, Jr.

Conclusion

6. Pending claims are not patentable.

7. Any inquiry concerning this communication or earlier communications from the
examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-
272-6759 (email address: cuong.nguyen@uspto.gov). The examiner can normally be
reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax
number for the examiner where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.

/CUONG H. NGUYEN/
Primary Examiner
Art Unit 3661